

Use of Precision Timing-Based Phase Cancelling Light Emission System for Electromagnetic Assay

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Simon Edwards

Research Acceleration Initiative

Introduction

In the publication of 31 August 2025, an imaging system was described with employs precision timing coupled with purposeful phase cancellation of microwave energy in order to infer the composition of scanned materials to a high degree of precision and using a safe form of electromagnetism for the purposes of medical imaging.

Abstract

The purpose of this publication is to re-apply a similar concept with a slight modification in order to allow for EM to be detected and characterized by measuring the way in which perfectly aligned phase cancellations are distorted by ambient EM, resulting in imperfect phase cancellation which can be subsequently inferred using a photon detector.

Rather than employing sweeping phase cancellation zones and offset timing of emission, this system without be substantially simpler, although it would not be used for medical imaging but would rather be used as an antenna. This system would involve the use of precision timing to trigger the emission of high-frequency light (must be higher than the frequency of the EM being measured) which produces phase cancellations in the center of a detection chamber which is kept in an atmospheric vacuum condition.

As ambient EM is admitted into the mechanism and it passes through the forward-moving beam (rear half) which is one half of two matched single-mode waves intersecting at a precision coordinate, a detector on the aperture side is calibrated only to detect the EUV light emitted by the mechanism and is shielded from exterior sources of EM. When no EM is passing through the vacuum chamber, phase cancellation would be entirely perfect and not even a single photon of EUV would be detected. The detection of EUV by the detector would be used to infer that EM passed through the phase cancellation zone. This is possible because the interaction of the ambient EM with the forward-moving beam slows the EUV control light by an infinitesimal margin, causing the phase to be slightly out of sync with the other beam, thus enabling some portion of the energy to get through. Each half-phase of a detected EM wave would result in a cluster of control photons ultimately being detected.

Precision timing would also be employed in order to infer frequency as the rhythm of desynchronizations could be used to infer the property of frequency of the detected EM. The number of EUV photons counted could be used to loosely infer amplitude, although the effect should produce only a handful of photons for each half-wave of opposing-direction interaction.

Conclusion

The availability of waveguides of sufficient precision and timing mechanisms of sufficient precision should enable precision phase cancellation useful for measuring through inference the light-slowing effects of EM upon other EM on a wave-for-wave basis. This constitutes yet another method in addition to the DMPS concept of 11 April 2024 in which a different strategy; amplifying the magnetic moment of received photons and negating the magnetic moment of a control photon coupled with measuring deviation to angular momentum; is used to infer the energy level of the received light.

In this case, the magnetic moment of the photons do not need to be transmogrified and only a photon counter, appropriate EM shielding and precision timing mechanisms and waveguides would be required.